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switching between the low power mode and the standard mode, wherein:

the low power mode maintains the laser diode at a temperature within a

predetermined range of temperatures; and

the standard mode maintains the laser diode at a temperature that

corresponds to a predetermined wavelength of light output from
the laser diode.

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9. (Amended) An apparatus comprising:

means for operating a thermo-electric cooler coupled to a laser diode in one of a low power mode and a standard mode; and

means for switching between the low power mode and the standard mode,
wherein the low power mode maintains the laser diode at a first
temperature within a predetermined range of temperatures and the
standard mode maintains the laser diode at a second temperature that
corresponds to a predetermined wavelength of light output from the laser
diode.

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14. (Amended) An optical transceiver comprising:

- a temperature circuit;
- a thermo-electric cooler coupled to the temperature circuit; and
- a laser diode coupled to the thermo-electric cooler, wherein the thermo-electric cooler is responsive to inputs from the temperature circuit, the inputs identifying one of at least a first mode and a second mode, wherein a choice of the one of at least a first mode and a second mode is a function of a performance requirement.